

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Patent Application No. 10/597,850

Confirmation No. 7034

Applicant: Uwe BERGER et al.

Filed: August 9, 2006

TC/AU: 3742

Examiner: Brian W. Jennison

Docket No.: 810119

Customer No.: 95402

APPELLANTS' REPLY BRIEF

Mail Stop Appeal Brief — Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In reply to the Examiner's Answer dated September 16, 2011, Appellants now submit their Reply Brief.

New Grounds of Rejection

The Examiner's Answer did not include any new grounds of rejection.

Related Appeals and Interferences

There are no appeals or interferences that are related to this appeal.

Status of Claims

Claims 6-12 are pending in the application and stand rejected. Claims 1-5 were previously cancelled. No claims are allowed.

Argument

Appellants respectfully maintain that the rejection of claims 6, 7 and 9-12 under 35 U.S.C. § 103(a) based on a combination of U.S. Patent No. 2,907,859 to Walkoe ("Walkoe") and U.S. Publication No. 2004/0027248 to Lile ("Lile"), and of claim 8 under 35 U.S.C. § 103(a) based on a combination of Walkoe, Lile and U.S. Publication No. 2003/0010221 to Berger should be withdrawn for all of the reasons set forth in the Appeal Brief. This Reply Brief includes a reply to the contentions set forth in the Examiner's Answer, and additional comments regarding the modification of Walkoe set forth in the rejection of claims 6 under 35 U.S.C. § 103 and claims 7 and 9-12 under 35 U.S.C. § 103.

Reply to Examiner's Answer

The Examiner's Answer states that the term "automatically" is not given patentable weight because the Office contends that the distinction between automatic and manual is considered an obvious modification (see page 6, lines 6-8 of the Examiner's Answer). However, it is respectfully submitted that claim 6 specifically requires closing the door "in response to a second signal indicative of a physical quantity including at least one of temperature and humidity in the cooking chamber falling below a predetermined threshold value." The art of record does not teach or suggest any method that includes closing the door in response to a signal, whether manually or otherwise. Thus, this feature of claim 6 is not a mere modification of a known manual operation to an automatic operation, since the references do not disclose or suggest the recited operation of closing the door in response to a signal indicative of a physical quantity, either manually or automatically. With respect to claim 7, Appellants clarify that Walkoe teaches away from a device configured to close the door, since Walkoe's device is configured to hold the door open. Accordingly, because Walkoe teaches away from the cooking device recited in claim 7, a person of ordinary skill in the art would not have thought it obvious to modify Walkoe to include this feature.

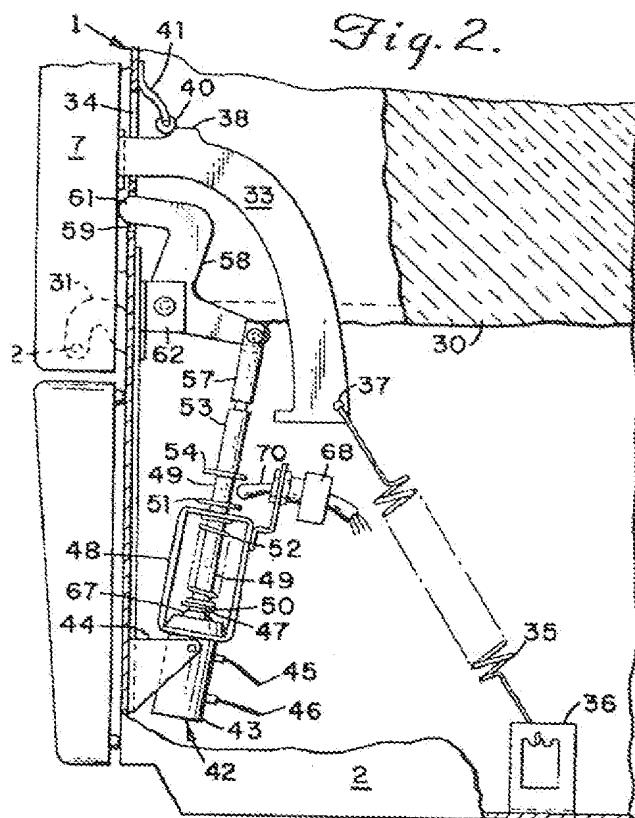
Further, contrary to the assertion set forth in the Response to Argument section of the Examiner's Answer, it is respectfully submitted that in the method described in Walkoe, the door will not "close in response to a second signal" (see Examiner's Answer, page 13, section 10). The Examiner's Answer contends that "[t]he cook closing the door occurs after the second signal of temperature since the bimetallic switch will 'switch' when the temperature is lowered. Therefore, the door will close in response to a second signal." Thus, it appears that

the contention in the Examiner's Answer is that, because the bimetallic switch will have already switched back to its original position due to the lowering of the temperature by the time the cook closes the door, then the cook's closing of the door is "in response to a second signal." However, it is respectfully submitted that a method in accordance with Walkoe, in which the cook closes the door manually would not render the method of claim 6 or the cooking appliance of claim 7 obvious, for the following reasons.

First, with respect to the method recited in claim 6, it is respectfully submitted that, even if the bimetal strip 24 of Walkoe switches due to a falling temperature after the opening of the door, the subsequent closing of the door by the cook would not be "*in response* to a second signal indicative of a physical quantity including at least one of temperature and humidity in the cooking chamber falling below a predetermined threshold value," (emphasis added) as required by claim 6. In such a scenario there would be no reason that the cook would be closing the door "*in response*" to the switching back of the bimetal strip resulting from the falling temperature. Indeed there would be no way for the cook to even be aware of whether the bimetal strip has switched back to its original position. It is respectfully submitted that, if anything, the cook's action would be in response to the first activation of the switch when the door is opened at the end of the cooking process, and not in response to the second activation of the switch. Moreover, switching of the bimetal strip is based on the temperature of a meat probe 10 (see Walkoe, column 3, line 61 to column 4, line 21), and thus is not indicative of a temperature or humidity in the cooking chamber, as required by claim 6. Accordingly, the signal provided by the meat probe is not "*a second signal* indicative of a physical quantity including at least one of temperature and humidity in the cooking chamber falling below a predetermined threshold value," as recited in claim 6. For all of the foregoing reasons, it is respectfully submitted that a method corresponding to Walkoe in which a cook closes the door after the bimetal strip returns to its original position due to a falling temperature, as apparently suggested in the Examiner's Answer, would not render obvious a method including "*automatically returning the door from the open position to the closed position in response to a second signal indicative of a physical quantity including at least one of temperature and humidity in the cooking chamber falling below a predetermined threshold value,*" as required by independent claim 6.

With respect to claim 7, that claim requires "*a control system configured . . . to actuate the positioning motor so as to automatically return the door to the closed position*

when a second signal is indicative of a physical quantity including at least one of temperature and humidity in the cooking chamber has fallen below a predetermined threshold value.” It is respectfully submitted that Walkoe and Lile, both individually and in combination, do not disclose or suggest a cooking device with a control system configured to return the door to a closed position when a signal is indicative of a physical quantity including at least one of temperature and humidity in the cooking chamber has fallen below a threshold value. Nor would it have been obvious, based merely on the eventual closing of the door by the cook, to make the control system of Walkoe close the door automatically. Indeed, as set forth in the Appeal Brief, Walkoe teaches away from a device configured to close the door, and instead teaches that the door is held open (see Walkoe, column 2, lines 16-18). Moreover, even though the ram 47 that opens the door in Walkoe is extended based on the activation of the bimetal strip 24, the ram does not retract based on deactivation of the bimetal strip 24. Instead, when the ram 47 is extended, the ram itself actuates a switch 70 that opens the circuit to the heating element 66 that controls actuation of the ram. See Walkoe, column 6, line 71 to column 7, line 4, column 7, lines 20-33, and Fig. 2 reproduced below. Thus, the extension of the ram 47 directly causes its subsequent retraction by flipping switch 70, and the bimetal strip 24 has no effect on the retraction of the ram. Accordingly, even if Walkoe were modified to remove the cam follower 40 and projection 38 that hold the door open, the retraction of the ram, and corresponding closing of the door, would not be related to the bimetal strip or any physical quantity in the oven. Therefore, even with this modification, Walkoe would still not include a control system configured to close the door when a second signal indicative of a physical quantity including temperature or humidity fell below a threshold value, as required by claim 7. As explained in more detail in the Appeal Brief, the combination of Walkoe with Lile would also not render the features of claim 7 obvious.



Walkoe – Fig. 2

For the foregoing reasons, it is respectfully submitted that independent claims 6 and 7, could not be rendered obvious by any combination, to the extent proper, of Walkoe and Lile. Claims 8-12 depend from claim 7 and are patentable over the cited references for at least the same reasons as claim 7 is.

Additional Comments Regarding the Modification of Walkoe

M.P.E.P. 2142 sets forth that the courts have held that “the key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious,” that “there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” and that “the legal conclusion must be reached on the basis of the facts gleaned from the prior art.” However, it is respectfully submitted that there is no reasoning with rational underpinning, based on facts from the prior art, for modifying Walkoe to be used in a method or configured

to close the door based on a second signal indicative of a physical quantity including at least one of temperature and humidity falling below a threshold value, as alleged by the Office. The Examiner's Answer (bottom of page 8) contends that:

Since Walkoe discloses that the arm which opened the door returns to the "closed" position after a temperature had fallen below a threshold even though the stopping element keeps the door open, it would have been obvious to close the door automatically once the threshold temperature has been reached since one having ordinary skill in the art would recognize advantages of closing the door so the temperature in the chamber does not decrease as quickly once the door has been opened to prevent the food from overcooking.

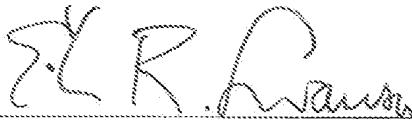
However, as explained in more detail above, contrary to this assertion, Walkoe does not disclose "that the [ram] which opened the door returns to the 'closed' position after a temperature had fallen below a threshold." Instead, the retraction of the ram in Walkoe is caused by the flipping of switch 70 when the ram is extended. See Walkoe, column 6, line 71 to column 7, line 4, column 7, lines 20-33. Thus, it is respectfully submitted that this portion of the reasoning for modifying Walkoe is not well supported. Furthermore, the second reason provided, that a person of ordinary skill in the art "would recognize advantages of closing the door so the temperature in the chamber does not decrease as quickly once the door has been opened to prevent food from overcooking," is not based on any facts gleaned from the prior art. None of the cited references indicate that a person of ordinary skill in the art would see an advantage in not allowing the temperature to decrease as quickly. Rather, since Walkoe's intention is to terminate the cooking process, a person of ordinary skill in the art would consider it advantageous to quickly decrease the temperature, and would have no reason to slow the temperature decrease. Indeed, Walkoe explicitly states that the device described therein is intended to address the need for an oven capable of "rapidly dissipating the accumulated oven heat." Therefore, a person of ordinary skill in the art would have had no reason to modify Walkoe "so the temperature in the chamber does not decrease as quickly," as alleged in the Examiner's Answer. Thus, it is respectfully submitted that the suggested reasoning presented by the Office for modifying Walkoe is not based on rational underpinning and a proper legal conclusion of obviousness has not been made on the basis of facts gleaned from the prior art. Accordingly, it is respectfully submitted that a *prima facie* case of obviousness has not been established.

CONCLUSION

For the foregoing reasons it is respectfully submitted that the rejection of claims 6-12 should be reversed. Appellants respectfully request that the rejections under 35 U.S.C. § 103 be withdrawn and the application passed to allowance.

The Commissioner is hereby authorized to charge any unpaid fees deemed required in connection with this submission, including any filing or application processing fees required under 37 C.F.R. § 1.16 or 1.17, or to credit any overpayment to Deposit Account No. 12-1216.

Respectfully submitted,



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*Claims Appendix***Claims 1-5 (Cancelled)**

Claim 6 (Previously Presented): A method for operating a cooking appliance having a cooking appliance control system and a door moveable between a closed position and an open position relative to a cooking chamber, the method comprising:

automatically moving the door from the closed position to the open position using the cooking appliance control system in response to a first signal indicative of a completion of a cooking process based on at least one of the exhaustion of a cooking time and a sensor signal provided by at least one of a temperature sensor and a humidity sensor disposed in the cooking chamber; and

automatically returning the door from the open position to the closed position in response to a second signal indicative of a physical quantity including at least one of temperature and humidity in the cooking chamber falling below a predetermined threshold value stored in a memory of the cooking appliance control system,

wherein the first signal and the second signal are different.

Claim 7 (Previously Presented): A cooking appliance comprising:
a cooking chamber bounded by a housing;
a door moveable between a closed position and a predetermined open position;
a cooking appliance control system having a memory;
a sensor disposed in the cooking chamber configured to send an output signal to the cooking appliance control system;

a guide device; and

a door opening device including a positioning motor and a rod configured to be automatically reciprocated in the guide device by the cooking appliance control system via the positioning motor so as to automatically move the door from the closed position to the predetermined open position and from the predetermined open position to the closed position, the cooking appliance control system configured to actuate the positioning motor so as to automatically move the door from the closed position to the predetermined open position in response to a first signal indicative of a completion of a cooking process based on at least one of the exhaustion of a cooking time and the output signal from the sensor and to actuate the positioning motor so as to automatically return the door to the closed position when a second

signal is indicative of a physical quantity including at least one of temperature and humidity in the cooking chamber has fallen below a predetermined threshold value stored in the memory, wherein the first signal and the second signal are different.

Claim 8 (previously presented): The cooking appliance as recited in claim 7, wherein the cooking appliance is a steam cooking appliance.

Claim 9 (previously presented): The cooking appliance as recited in claim 7, wherein the positioning motor includes an electrically heatable shape-memory element.

Claim 10 (previously presented): The cooking appliance as recited in Claim 7, further comprising a return element disposed between the door and the housing, wherein the return element is in force-transmitting connection with the door and the housing and is configured to aid the return of the door from the predetermined open position to the closed position.

Claim 11 (previously presented): The cooking appliance as recited claim 7, further comprising at least one of a spring device and a damping device mounted on the rod and configured to retard a movement of the door from the closed position to the predetermined open position.

Claim 12 (previously presented): The cooking appliance as recited claim 7, further comprising at least one of a spring device and a damping device mounted on the rod and configured to retard a movement of the door from the predetermined open position to the closed position.

Evidence Appendix

(None)

Related Proceedings Appendix

(None)